

**Executive Order VR-201-A  
Healy Phase II EVR System  
Not Including ISD**

**Exhibit 3**

**Manufacturing Performance Standards and Specifications**

The Healy Phase II EVR System Not Including ISD and all components shall be manufactured in compliance with the performance standards and specifications in CP-201 (amended July 22, 2004), as well as the requirements specified in this Executive Order. All components (Exhibit 1) shall be manufactured as certified; no change to the equipment, parts, design, materials or manufacturing process shall be made unless approved in writing by the Executive Officer or Executive Officer delegate. Unless specified in Exhibit 2 or in the ***ARB Approved Installation, Operation and Maintenance Manual for the Healy EVR System Not Including ISD***, the requirements of this section apply to the manufacturing process and are not appropriate for determining the compliance status of a gasoline dispensing facility.

**1. NOZZLES**

Each nozzle shall be 100 percent performance tested at the factory. Each nozzle shall have affixed to it a card or label stating the performance specifications listed below, and a statement that the nozzle was tested to, and met, the following specifications.

- a. The nozzle vapor valve leak rate shall not exceed 0.038 cubic feet per hour (CFH) at a pressure of +2 inches H<sub>2</sub>O when tested in accordance with the latest version of TP-201.2B.
- b. The nozzle vapor valve leak rate shall not exceed 0.10 CFH at a vacuum of -100 inches H<sub>2</sub>O when tested in accordance with the latest version of TP-201.2B.
- c. The nozzle automatic shut off feature is tested 100% at all three full service clip settings as well as handheld in accordance with Under Writers Laboratories (UL) Standard 842.
- d. The nozzle is 100% tested in accordance with the California Department of Food and Agriculture Division of Measurement Standards Article 2 (DMS 6-6-97).

- e. The nozzle is manufactured to the specifications that passed all tests conducted during the ARB certification for the following:
  - TP-201.2C - Spillage from Phase II Systems
  - TP-201.2D - Post Fueling Drips From Nozzles
  - TP-201.2E - Gasoline Liquid Retention in Nozzles and Hoses
- f. The nozzle is manufactured to meet the Vapor to Liquid Ratio as specified in Exhibit 2.
- g. The terminal end of each nozzle shall be manufactured in accordance with the specifications referenced in Section 4.7.3 of CP-201.

## **2. INVERTED COAXIAL HOSES**

- a. The inverted coaxial hoses are 100% tested for continuity and pressure tests in accordance with UL Standard 330.

## **3. HOSE ADAPTERS**

- a. The hose adaptors are 100% tested for continuity and pressure tests in accordance with UL Standard 567.

## **4. RECONNECTABLE BREAKAWAY COUPLINGS**

- a. The reconnectable breakaway couplings are 100% tested for continuity and pressure tests in accordance with UL Standard 567.

## **5. FLOW LIMITER**

- a. The flow limiters are 100% tested to 50 pounds per square inch (psi) liquid pressure to verify maximum gasoline flow rate limited to 10 gpm.

## **6. VP1000 VACUUM PUMPS**

- a. The vacuum pump is 100% pressure tested in accordance with UL Standard 79.
- b. The VP1000 vacuum pump is manufactured to the exact specifications that passed all tests conducted during the ARB certification.
- c. The MC100 control module is 100% tested in the factory to verify proper operation.

## **7. TANK PRESSURE MANAGEMENT SYSTEM**

- a. The Clean Air Separator tank is designed, constructed, tested, inspected and stamped per the American Society of Mechanical Engineers (ASME) Code Section VIII, Division 1, 2001 Edition, 2003 Addendum.
- b. The Clean Air Separator bladder is 100% performance and pressure tested to ensure its integrity.

## **8. PRESSURE/VACUUM (P/V) VENT VALVES FOR UST VENT PIPES**

- a. Each P/V vent valve shall be 100 percent performance tested at the factory for cracking pressure and leak rate at each specified pressure setting and shall be done in accordance with TP-201.1E, *Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves*. Each P/V vent valve shall be shipped with a card or label stating the performance specifications listed below, and a statement that the valve was tested to, and met, these specifications.
  - 1. The pressure settings for the P/V vent valve
    - Positive pressure setting of  $3.0 \pm 0.5$  inches H<sub>2</sub>O.
    - Negative pressure setting of  $-8.0 \pm 2.0$  inches H<sub>2</sub>O.
  - 2. The leak rate for each P/V vent valve, including connections, shall not exceed:
    - 0.05 CFH at 2.0 inches H<sub>2</sub>O.
    - 0.21 CFH at  $-4.00$  inches H<sub>2</sub>O.
- b. Each P/V vent valve shall have permanently affixed to it a yellow or gold label with black lettering listing the positive and negative pressure settings specified above. The lettering of the label shall be a minimum font size of 20.